

## **Abstract**

Methods, apparatus and systems are directed to managing network traffic  
5 using a variable length Cyclical Redundancy Check (CRC) index to hash an address  
header. The invention copies an address header of a data packet to a CRC generator. A  
CRC index is determined based, in part, on the address header. A subset of bits is  
determined from the CRC index based, in part, on a predetermined bit mask. The address  
header and the data payload are then combined with the subset of bits from the CRC  
10 index. The modified data packet is subsequently forwarded over a network. In one  
embodiment, the invention is implemented on a hardware circuit residing on a traffic  
device.

Customer No. 38879